

AbstractPROCESS TO EXTRACT PHENOLIC COMPOUNDS FROM A RESIDUAL
PLANT MATERIAL USING A HYDROTHERMAL TREATMENT

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The hydrothermal treatment is based on placing the crude residual plant material in contact with hot water in a closed reactor, comprising the following steps:

- 10 a) placing the material to be treated in contact with water in a closed reactor, and adjusting the solid/liquid ratio so that it ranges from 1/5 to 1/15 (w/v):
- b) stirring;
- c) heating to a temperature between 180 and 240°C, and at a pressure so that the water is maintained in liquid
- 15 phase;
- d) constantly stirring the mixture for a time period between 4 and 30 minutes; and
- e) cooling the reactor to approximately 40°C, unloading the mixture, filtering and recovering the liquid
- 20 fraction.

Figure 1.